

DOCKET NO. D-1988-052-3

DELAWARE RIVER BASIN COMMISSION

Discharge to the Drainage Area of Special Protection Waters

**Grand Central Sanitary Landfill, Inc.
Industrial Wastewater Treatment Plant Discharge
Plainfield Township, Northampton County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Grand Central Sanitary Landfill, Inc. (GCSL) on March 9, 2011 (Application), for approval of an existing leachate treatment plant (LTP) discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0070483 for this project was issued by the Pennsylvania Department of Environmental Protection (PADEP) on December 21, 2009, effective on January 1, 2010.

The Application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Lehigh Valley Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on July 11, 2012.

A. DESCRIPTION

- 1. Purpose.** The purpose of this docket is to approve the existing 0.1 million gallons per day (mgd) GCSL LTP and its related discharge. The GCSL LTP was approved via Docket No. D-88-52-2; however, the docket holder did not submit an application for renewal prior to the docket expiration date of April 30, 2009.
- 2. Location.** The existing LTP is located in Plainfield Township, Northampton County, Pennsylvania. The LTP will continue to discharge treated effluent to the Little Bushkill Creek, which is a tributary of the Bushkill Creek, at River Mile 184.1 – 8.5 – 8.6 (Delaware River – Bushkill Creek-Little Bushkill Creek) via Outfall No. 001. The discharge is located in the drainage area to the non-tidal Delaware River known as the Lower Delaware, which is designated as Special Protection Waters (SPW).

The project outfall is located in the Bushkill Creek Watershed as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 50' 43"	75° 15' 48"

3. Area Served. The docket holder's existing LTP will continue to serve the 537.9 acre on-site landfill only.

GCSL services residential, commercial and industrial customers mainly in Pennsylvania and New Jersey. The docket holder does not currently accept, treat, or pre-treat any hydraulic fracturing wastewater from sources in or out of the Basin and is prohibited from accepting, treating/pre-treating any hydraulic fracturing wastewater from sources in or out in the absence of a docket modification. Approximately one third (1/3) of the waste is from New Jersey and two thirds (2/3) is from Pennsylvania. Approximately 93.2 % of the waste sent to GCSL originates from sources that are within the Delaware River Basin (DRB). Based on this percentage, it is estimated that 6,800 gpd of the 100,000 gpd LTP effluent could be attributed to sources that are located outside of the DRB. In accordance with DRBC policy, GCSL will continue to be required to remove 100 % percent of the associated Biochemical Oxygen Demand (BOD) waste load from flow sources that are outside of the DRB.

For the purpose of defining the Area Served, sections B (Type of Discharge) and D (Service Area) of the docket holder's Application are incorporated herein by reference, to the extent consistent with all other conditions contained in the DECISION Section of this docket.

4. Physical Features.

a. Design Criteria. The existing LTP is designed to provide the Best Available Treatment (BAT) using a sequencing batch reactor (SBR) treatment system, micro-filtration, and reverse osmosis treatment technology to treat an average flow of 0.1 mgd of leachate from the active and inactive sections of the GCSL. The maximum design capacity will continue to be 0.15 mgd.

The treatment plant is part of an overall leachate management program at the landfill. Due to the quantity and variable nature of leachate generated at the site, the landfill requires several options to accommodate different flow scenarios. Wastewater from the landfill is piped to the LTP where it is treated and discharged to Little Bushkill Creek via outfall No. 001. The reverse osmosis treatment process generates reject water which is spray applied to the working face and lined portions of the landfill. GCSL also trucks a portion of the reverse osmosis reject water to licensed off-site facilities, including the City of Allentown wastewater treatment plant (WWTP) and the Lehigh County Authority WWTP in Fogelsville, Pennsylvania. During periods of abnormally high precipitation, GCSL also transports untreated effluent to these facilities to maintain sufficient capacity in the influent storage facilities. GCSL is also permitted to spray apply treated wastewater and raw leachate to the working face and lined portions of the landfill, but primarily spray applies the reverse osmosis reject water to the lined areas of the landfill.

Previously, under an agreement with the Pen Argyl Municipal Authority, located in Pen Argyl Borough, Northampton County, the GCSL LTP conveyed pre-treated leachate to the Pen Argyl Municipal Authority Wastewater Treatment Plant (WWTP) for treatment and discharge to Waltz Creek. Pre-treated leachate from the GCSL LTP is not presently conveyed to the Pen Argyl Municipal Authority WWTP since currently there is no agreement for the WWTP to receive the pre-treated leachate from the GCSL LTP; however, the docket holder indicated that the agreement may be reinstated in the future. The Pen Argyl Municipal Authority WWTP was most recently approved by DRBC Docket No. D-1975-028 CP-3 on July 11, 2012. The PADEP issued its most recent NPDES Permit No. PA0037052-A1 on March 1, 2012 for this treatment facility. The treatment facility has adequate capacity to receive wastewater from the LTP.

The LTP is designed to remove more than 95% of influent BOD and suspended solids, therefore DRBC's requirement of removing 100% of the BOD waste load that is associated with flow sources that are outside of the DRB can continue to be met, while achieving the Commission's requirement for BOD removal of in-basin waste load of greater than 85%.

b. Facilities. The LTP treatment facilities consist of a plate settler system that includes a pre-mix tank, rapid mix tank, a flocculation tank, and a neutralization tank. From the plate settler system, flow enters into two (2) pre SBR equalization tanks then into two (2) SBR tanks that include the option of carbon addition. From the SBRs, flow enters into two (2) post-SBR equalization tanks, then a PALL microfilter, then a two-pass reverse osmosis unit. Flow enters two (2) post-aeration tanks prior to discharge.

The docket holder's wastewater treatment facility discharges to waters classified as SPW and is required to have available emergency power. The facility has three (3) back-up generators that are automatically activated whenever the facility loses primary power.

The LTP has a remote alarm system that continuously monitors plant operations and alerts facility personnel.

The docket holder's existing wastewater treatment facility has prepared and implemented an emergency management plan (EMP) in accordance with Commission requirements.

The project facilities are not located in the 100-year floodplain.

Wasted sludge will continue to be land-filled onsite.

c. NPDES Permit / DRBC Docket. NPDES Permit No. PA0070483 was approved by the PADEP on December 21, 2009, effective January 1, 2010 and includes final effluent limitations for the project discharge of 0.10 mgd to surface waters classified by the PADEP as high quality cold water fishery (HQ-CWF). The following average monthly effluent limits are among those listed in the NPDES Permit and meet or are more stringent than the effluent requirements of the DRBC.

EFFLUENT TABLE A-1: DRBC Parameters Included in NPDES Permit

OUTFALL 001		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Total Suspended Solids	27 mg/l	As required by NPDES Permit
Fecal Coliform	200 colonies per 100 ml as geo average	As required by NPDES Permit
Dissolved Oxygen	6.0 mg/l (minimum at all times)	As required by NPDES Permit
CBOD (5-Day at 20° C) *	25 mg/l (85% minimum removal*)	As required by NPDES Permit
Ammonia Nitrogen*	3.0 mg/l*	As required by NPDES Permit
Total Dissolved Solids**	1,000 mg/l *	As required by NPDES Permit
True color	100 Pt. Co. Units	As required by NPDES Permit

* DRBC Requirement

** See DECISION Condition II.q.

EFFLUENT TABLE A-2: DRBC Parameters Not Included in NPDES Permit

OUTFALL 001		
PARAMETER	LIMIT	MONITORING
Phosphorus	Monitor & Report *	Monthly *
Nitrate as N	Monitor & Report *	Monthly *
Total Nitrogen	Monitor & Report *	Monthly *

* After 12 months of monthly sampling, the docket holder may request in writing to the Executive Director to modify the monitoring frequency for phosphorus, nitrate as N, and total nitrogen.

- d. **Cost.** There are no construction costs associated with this docket renewal.

B. FINDINGS

The purpose of this docket is to approve the existing 0.1 mgd GCSL LTP and its related discharge. The docket holder submitted an application for renewal of the GCSL LTP discharge on March 9, 2011. The Commission approved Docket No. D-88-52-2 on July 20, 2005. The docket holder did not submit an application for renewal of the docket prior to Docket No. D-88-52-2 expiring on April 30, 2009. No modifications to the LTP or its discharge are proposed.

In 1992, the DRBC adopted SPW requirements, as part of the DRBC *Water Quality Regulations (WQR)*, designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap has been classified by the DRBC as SPW. This

stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area. (Lower SPW)

On July 16, 2008, the DRBC approved amendments to its *WQR* that provide increased protection for waters that the Commission classifies as SPW. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for SPW designation and clarity on definitions and terms were updated for the entire program. (Lower SPW)

The project LTP discharges to the drainage area of the non-tidal Delaware River known as the lower Delaware, which is designated as SPW.

Article 3.10.3A.2.e.1). and 2). of the Commission's *WQR* states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of SPW must submit for approval a Non-Point Source Pollution Control Plan (NPSPCP) that controls the new or increased non-point source loads generated within the portion of the docket holder's service area which is also located within the drainage area of SPW. The docket holder's discharge is located within the drainage area to SPW. Since this project does not entail additional construction and expansion of facilities/service area (i.e. there are not any new or increased non-point source loads associated with this approval), the NPSPCP is not applicable at this time. Accordingly, DECISION Condition II.m. has been included in this docket.

The docket holder began discharging treated effluent from the plant to Little Bushkill in February 2006.

The nearest surface water intake of record for public water supply downstream of the project discharge is located on the Delaware River at Point Pleasant, Pennsylvania and is operated by Forest Park Water (North Penn and North Wales Water Authority) at river mile 156.87, approximately 44 river miles distant.

At the project site, Little Bushkill Creek has an estimated seven-day low flow with a recurrence interval of ten years of 0.16 mgd (0.244 cfs). The ratio of this low flow to the average design wastewater discharge from the 0.1 mgd plant is 1.6 to 1.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The limits in the NPDES Permit are in compliance with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the *WQR* of the DRBC.

C. DECISION

I. Effective on the approval date for Docket No. D-1988-052-3 below:

a. Docket No. D-88-52-2 is terminated and replaced by Docket No. D-1988-052-3; and

II. The project and appurtenant facilities as described in the Section A “Physical Features” of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP in its NPDES Permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s.

b. The facility and operational records shall be available at all times for inspection by the DRBC.

c. The facility shall be operated at all times to comply with the requirements of the *WQR* of the DRBC.

d. The docket holder shall comply with the requirements contained in the Effluent Tables in Section A.4.d. of this docket. The docket holder shall submit the required monitoring results directly to the DRBC Project Review Section. The monitoring results shall be submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations.

e. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the docket holder shall apply for approval from the Executive Director or for a docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.

f. If at any time the receiving treatment plant proves unable to produce an effluent that is consistent with the requirements of this docket approval, no further connections shall be permitted until the deficiency is remedied.

g. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

h. The docket holder is permitted to treat and discharge wastewaters as set forth in the Area Served section of this docket, which incorporates by reference sections B (Type of Discharge) and D (Service Area) of the docket holder’s Application to the extent consistent with all other conditions of this DECISION section.

i. The docket holder shall make wastewater discharge in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

j. The discharge of wastewater shall not increase the ambient temperatures of the receiving waters by more than 5°F, nor shall such discharge result in stream temperatures exceeding 87°F. (Non-tidal, Non-trout Waters)

k. Nothing in this docket approval shall be construed as limiting the authority of DRBC to adopt and apply charges or other fees to this discharge or project.

l. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.

m. Prior to allowing connections from any new service areas or any new developments subject to Section 3.10.3A.2.e, the docket holder shall either submit and have approved by the Executive Director of the DRBC a NPSPCP in accordance with Section 3.10.3.A.2.e, or receive written confirmation from the Executive Director of the DRBC that the new service area is in compliance with a DRBC approved NPSPCP.

n. A complete application for the renewal of this docket, or a notice of intent to cease the operations (withdrawal, discharge, etc.) approved by this docket by the expiration date, must be submitted to the DRBC at least 6 months prior to the expiration date below (unless permission has been granted by the DRBC for submission at a later date), using the appropriate DRBC application form. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below, the terms and conditions of this docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

o. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

p. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

q. The docket holder may request of the Executive Director in writing the substitution of specific conductance for TDS. The request should include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow the substitution of specific conductance for TDS monitoring.

r. After 12 months of monthly sampling for the parameters listed in Effluent Table A-2 in Section A.4.d. of this docket, the docket holder may request of the Executive Director in writing to modify the required monitoring contained within this docket approval. Upon review of the submitted monthly sampling results, the Executive Director may modify the monitoring requirements contained in Effluent Table A-2.

s. Nothing in this docket constitutes a defense to any penalty action for past conduct of the docket holder or ongoing activity not authorized by this approval. In particular, renewal of this docket does not resolve violations – whether in the past or continuing – of provisions of the Delaware River Basin Compact (“Compact”) or any rule, regulation, order or approval duly issued by the Commission or the Executive Director pursuant to the Compact. The Commission reserves its right to take appropriate enforcement action against the docket holder, including but not limited to recovery of financial penalties consistent with Section 14.17 of the Compact, for any and all such prior or continuing violations.

BY THE COMMISSION

DATE APPROVED: July 11, 2012

EXPIRATION DATE: December 31, 2014